

\* \* \* \* \* STN Columbus \* \* \* \* \*

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                               ENTRY      SESSION
FULL ESTIMATED COST          0.21         0.21
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STRUCTURE FILE UPDATES: 24 JUL 2007 HIGHEST RN 943299-07-8  
DICTIONARY FILE UPDATES: 24 JUL 2007 HIGHEST RN 943299-07-8

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on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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L1          3 QQRFEVEFEQQ/SQSP
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=> d l1 1-3 sqide
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L1  ANSWER 1 OF 3  REGISTRY  COPYRIGHT 2007 ACS on STN
RN   652995-76-1  REGISTRY
CN   L-Glutamamide, N2-acetyl-L-glutaminyl-L-glutaminyl-L-arginyl-L-
      phenylalanyl-L-α-glutamyl-L-tryptophyl-L-α-glutamyl-L-
      phenylalanyl-L-α-glutamyl-L-glutaminyl-, compd. with
      N2-acetyl-L-glutaminyl-L-glutaminyl-L-ornithyl-L-phenylalanyl-L-ornithyl-L-
      tryptophyl-L-ornithyl-L-phenylalanyl-L-glutaminyl-L-glutaminyl-L-
      glutamamide (1:1) (9CI) (CA INDEX NAME)
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  22,11,11
NTE  complex
      modified
```

type	location		description
terminal mod.	Gln-1	-	N-acetyl
terminal mod.	Gln-11	-	C-terminal amide
uncommon	Orn-3'	-	-
uncommon	Orn-5'	-	-
uncommon	Orn-7'	-	-

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SEQ      1 QQRFEVEFEQ Q
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HITS AT: 1-11

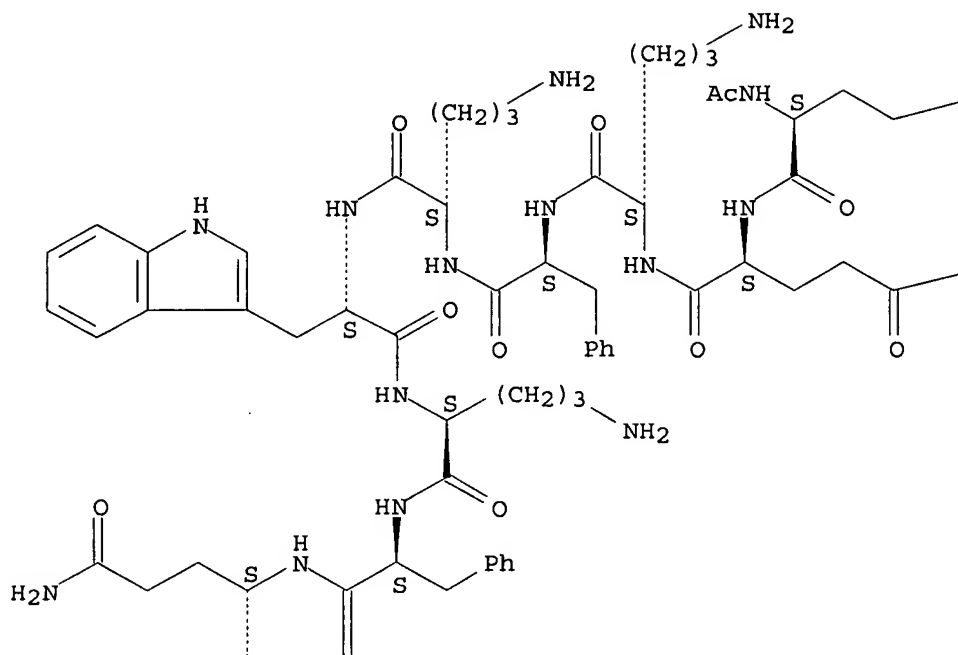
SEQ 1 QQXFXWXFQQ Q  
MF C72 H98 N20 O22 . C71 H103 N21 O17  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA Caplus document type: Journal  
RL.NP Roles from non-patents: FORM (Formation, nonpreparative); PRP  
(Properties)

CM 1

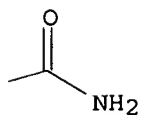
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CMF C71 H103 N21 O17

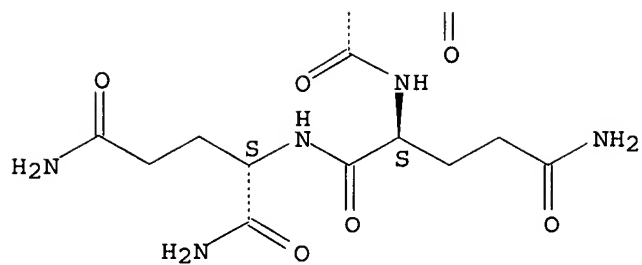
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



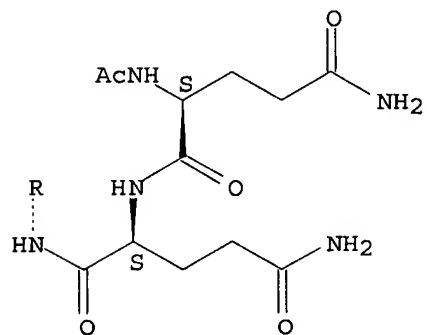
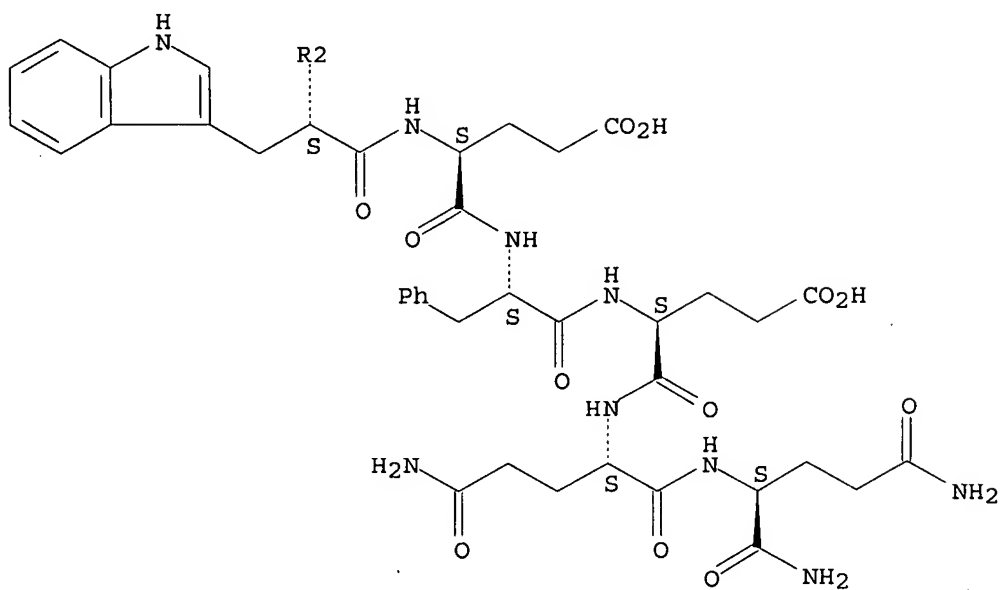


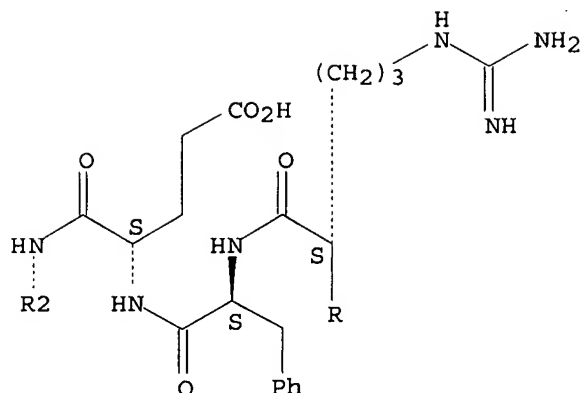
CM 2

CRN 593266-60-5

CMF C72 H98 N20 O22

Absolute stereochemistry.





1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 593266-60-5 REGISTRY  
 CN L-Glutamamide, N2-acetyl-L-glutaminyl-L-glutaminyl-L-arginyl-L-phenylalanyl-L- $\alpha$ -glutamyl-L-tryptophyl-L- $\alpha$ -glutamyl-L-phenylalanyl-L- $\alpha$ -glutamyl-L-glutaminyl- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 SQL 11  
 NTE modified

type	location	description
terminal mod.	Gln-1	N-acetyl
terminal mod.	Gln-11	C-terminal amide

SEQ 1 QQRFEWEFEQ Q  
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HITS AT: 1-11

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C72 H98 N20 O22

CI COM

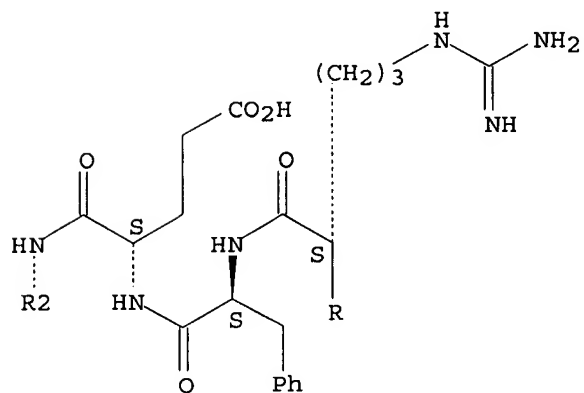
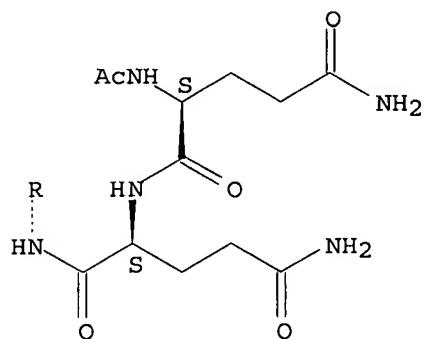
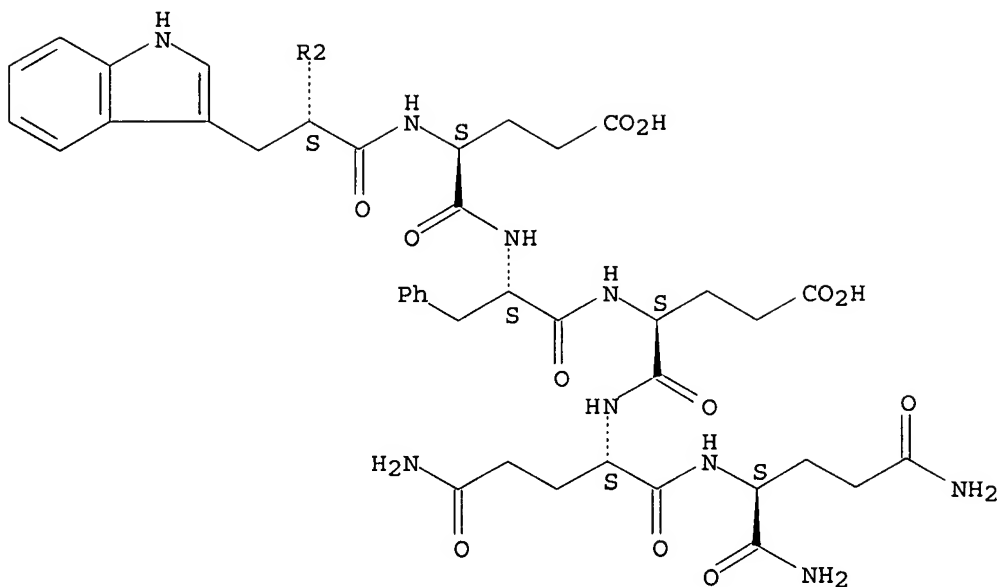
SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);  
 PROC (Process); PRP (Properties); USES (Uses)

Absolute stereochemistry.



5 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 255379-31-8 REGISTRY  
CN L-Glutamine, L-glutaminyl-L-glutaminyl-L-arginyl-L-phenylalanyl-L- $\alpha$ -  
glutamyl-L-tryptophyl-L- $\alpha$ -glutamyl-L-phenylalanyl-L- $\alpha$ -glutamyl-  
L-glutaminyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3: PN: WO2004007532 TABLE: 1 claimed protein  
CN 5: PN: WO03006494 PAGE: 7 claimed protein  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 11

PATENT ANNOTATIONS (PNTE):

Sequence	Patent
Source	Reference
Not Given	WO2003006494
	claimed PAGE 7

SEQ 1 QQRFEWEFEQ Q

=====

HITS AT: 1-11

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C70 H95 N19 O22

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

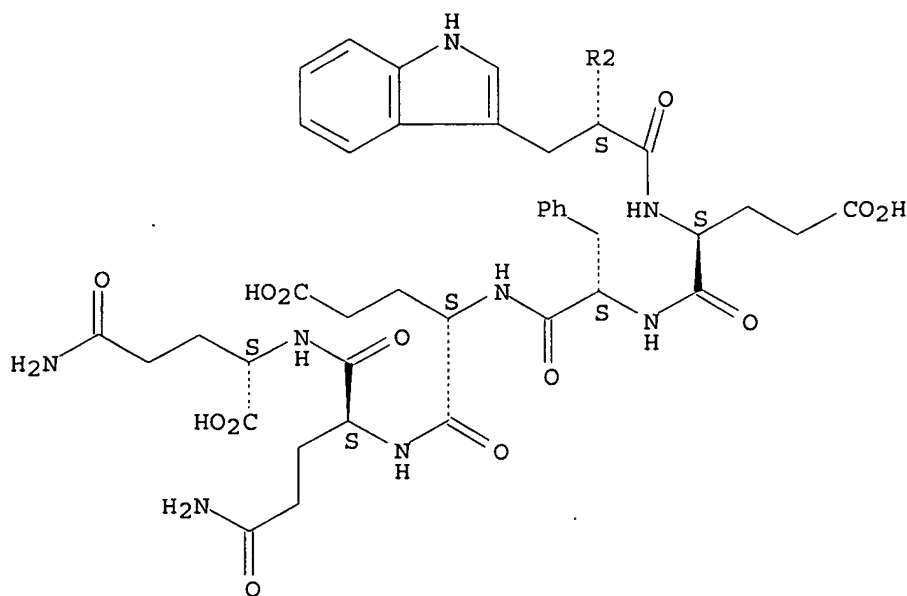
DT.CA Caplus document type: Conference; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP  
(Properties); USES (Uses)

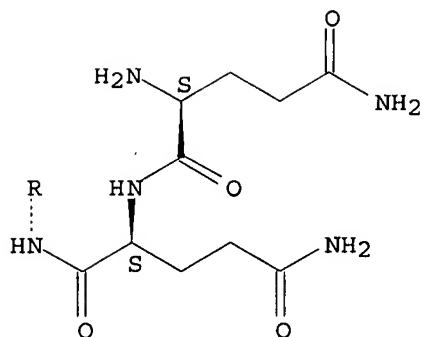
RL.NP Roles from non-patents: PRP (Properties)

Absolute stereochemistry.

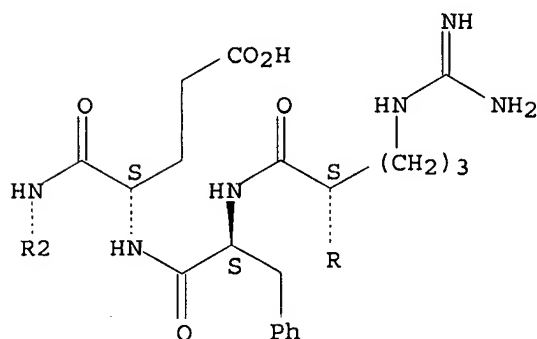
PAGE 1-A



PAGE 2-A



PAGE 3-A



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file hcaplus  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
49.90	50.11

FILE 'HCAPLUS' ENTERED AT 08:19:39 ON 25 JUL 2007  
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FILE COVERS 1907 - 25 Jul 2007 VOL 147 ISS 5  
FILE LAST UPDATED: 24 Jul 2007 (20070724/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1

L2 8 L1

=> d l2 1-8 ibib abs

L2 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:710941 HCAPLUS

DOCUMENT NUMBER: 145:342130

TITLE: Self-assembling peptides as injectable lubricants for osteoarthritis

AUTHOR(S): Bell, Carol J.; Carrick, Lisa M.; Katta, Jayanth; Jin, Zhongmin; Ingham, Eileen; Aggeli, Amalia; Boden, Neville; Waigh, Thomas A.; Fisher, John

CORPORATE SOURCE: Institute of Medical and Biological Engineering, School of Mechanical Engineering, University of Leeds, Leeds, West Yorkshire, LS2 9JT, UK

SOURCE: Journal of Biomedical Materials Research, Part A (2006), 78A(2), 236-246

CODEN: JBMRCH; ISSN: 1549-3296

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The self-assembly of peptides is explored as an alternative route towards the development of new injectable joint lubricants for osteoarthritis (OA). The versatility of the peptide chemical allows the incorporation of behavior reminiscent of hyaluronic acid (HA), while the triggered in situ self-assembly provides easy delivery of the samples by injection due to the low viscosity of the peptide solns. (that are initially monomeric). Using design criteria based on the chemical properties of HA, a range of de novo peptides were prepared with systematic alterations of charge and hydrophilicity that self-assembled into nematic fluids and gels in physiol. solution conditions. The frictional characteristics of the peptides were evaluated using cartilage on cartilage sliding contacts along with their rheol. characteristics. Peptide P11-9, whose mol., mesoscopic, and rheol. properties most closely resembled HA was found to be the most effective lubricant amongst the peptides. In healthy static and dynamic friction testing (corresponding to healthy joints) P11-9 at 20-40 mg/mL performed similar to HA at 10 mg/mL. In friction tests with damaged cartilage (corresponding to early stage OA) P11-9 was a less efficient lubricant than HA, but still the best among all the peptides tested. The results indicate that de novo self-assembling peptides could be developed as an alternate therapeutic lubricant for early stage OA.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:267262 HCAPLUS

DOCUMENT NUMBER: 142:458814

TITLE: The Internal Dynamic Modes of Charged Self-Assembled Peptide Fibrils

AUTHOR(S): Carrick, L.; Tassieri, M.; Waigh, T. A.; Aggeli, A.; Boden, N.; Bell, C.; Fisher, J.; Ingham, E.; Evans, R. M. L.

CORPORATE SOURCE: Centre for Self-Organizing Molecular Systems, Department of Chemistry, University of Leeds, Leeds, LS2 9JT, UK

SOURCE: Langmuir (2005), 21(9), 3733-3737

CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society



DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Photon correlation spectroscopy is used to study the internal dynamics of self-assembled charged peptide fibrils. Short neutral and charged polymeric aggregates have diffusive modes due to whole macromol. motion. For long semiflexible fibrils the logarithm of the intermediate scattering function follows a  $q^2t^{3/4}$  scaling at long times consistent with a Kratky-Porod free energy and preaveraged Oseen hydrodynamics. Persistence lengths on the order of micrometers are calculated for the peptide fibrils consistent with ests. from the liquid-crystalline phase behavior. Fibril diam.

(5-35 nm) calculated from the initial decay of the correlation functions are in agreement with transmission electron microscopy measurements.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:60539 HCAPLUS

DOCUMENT NUMBER: 140:124868

TITLE: Supramolecular networks made by  $\beta$ -sheet self-assembly of rationally designed peptides, and their uses as industrial fluids, personal care products, tissue engineering scaffolds and drug delivery systems

INVENTOR(S): Boden, Neville; Agelli, Amalia; Ingham, Eileen; Kirkham, Jennifer

PATENT ASSIGNEE(S): University of Leeds, UK

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004007532	A2	20040122	WO 2003-GB3016	20030715
WO 2004007532	A9	20040226		
WO 2004007532	A3	20040429		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003250402	A1	20040202	AU 2003-250402	20030715
EP 1523494	A2	20050420	EP 2003-763994	20030715
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2006516411	T	20060706	JP 2004-520857	20030715
US 2006154852	A1	20060713	US 2005-521628	20050908
PRIORITY APPLN. INFO.:			GB 2002-16286	A 20020715
			WO 2003-GB3016	W 20030715

AB This invention relates to novel supramol. aggregates, polymers and networks made by  $\beta$ -sheet self-assembly of rationally designed peptides, and their uses as responsive industrial fluids (oil exploration), as personal care products, as tissue reconstruction devices, or as controlled drug delivery systems.

L2 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:979729 HCAPLUS  
 DOCUMENT NUMBER: 140:146504  
 TITLE: Self-assembling peptide polyelectrolyte  $\beta$ -sheet complexes form nematic hydrogels  
 AUTHOR(S): Aggeli, Amalia; Bell, Mark; Boden, Neville; Carrick, Lisa M.; Strong, Andrew E.  
 CORPORATE SOURCE: Centre for Self-Organizing Molecular systems, Department of Chemistry, University of Leeds, Leeds, LS2 9JT, UK  
 SOURCE: Angewandte Chemie, International Edition (2003), 42(45), 5603-5606  
 CODEN: ACIEF5; ISSN: 1433-7851  
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 140:146504  
 AB Fibrillar networks built up from polyelectrolyte  $\beta$ -sheet complexes formed by spontaneous self-assembly, when solns. of prepared on solid phase cationic and anionic oligopeptides are mixed, were studied by FTIR, CD, NMR, and TEM spectroscopies. At the macroscopic level the resulting solns. are nematic hydrogels. The polyelectrolyte  $\beta$ -sheet complexes have 1:1 stoichiometry and their networks quite robust to variations in pH or peptide concentration  
 REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:968504 HCAPLUS  
 DOCUMENT NUMBER: 140:146500  
 TITLE: Energy Migration in Novel pH-Triggered Self-Assembled  $\beta$ -Sheet Ribbons  
 AUTHOR(S): Kayser, Veysel; Turton, David A.; Aggeli, Amalia; Beevers, Andrew; Reid, Gavin D.; Beddard, Godfrey S.  
 CORPORATE SOURCE: Department of Chemistry and Centre for Chemical Dynamics, University of Leeds, Leeds, LS2 9JT, UK  
 SOURCE: Journal of the American Chemical Society (2004), 126(1), 336-343  
 CODEN: JACSAT; ISSN: 0002-7863  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Energy migration between tryptophan (Trp) residues has been exptl. demonstrated in self-assembled peptide tapes (peptide = MeCO-Gln-Gln-Arg-Phe-Glu-Trp-Glu-Phe-Glu-Gln-Gln-NH<sub>2</sub>). The peptide self-assembly is pH-sensitive and forms amphiphilic tapes, which further stack in ribbons (double tapes) and fibrils in water depending on the concentration. Fluorescence spectra, quenching, and anisotropy expts. showed that  
 when the pH is lowered from 9 to 2, the peptide self-assembly buries the Trp in a hydrophobic and restricted environment in the interior of stable ribbons as expected on the basis of the peptide design. These fluorescence data support directly and for the first time the presence of such ribbons which are characterized by a highly packed and stable hydrophobic interior. In common with Trp in many proteins, fluorescence lifetimes are nonexponential, but the average lifetime is shorter at low pH, possibly due to quenching with neighboring Phe residues. Unexpectedly, time-resolved fluorescence anisotropy does not change significantly with self-assembly when in water. In highly viscous sucrose-water mixts., the anisotropy decay at low pH was largely unchanged compared to that in water, whereas at high pH, the anisotropy decay increased significantly. The authors concluded that depolarization at low pH was not due to rotational diffusion but mainly due to energy migration between adjacent Trp residues. This was supported by a master equation kinetic model of Trp-Trp energy migration, which showed that the simulated and exptl.

results are in good agreement, although on average only three Trp residues were visited before emission.

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:541302 HCAPLUS

DOCUMENT NUMBER: 139:230992

TITLE: pH as a Trigger of Peptide  $\beta$ -Sheet Self-Assembly and Reversible Switching between Nematic and Isotropic Phases

AUTHOR(S): Aggeli, Amalia; Bell, Mark; Carrick, Lisa M.; Fishwick, Colin W. G.; Harding, Richard; Mawer, Peter J.; Radford, Sheena E.; Strong, Andrew E.; Boden, Neville

CORPORATE SOURCE: Centre for Self-Organising Molecular Systems, Department of Chemistry and School of Biochemistry and Molecular Biology, University of Leeds, Leeds, LS2 9JT, UK

SOURCE: Journal of the American Chemical Society (2003), 125(32), 9619-9628  
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The hierarchical self-assembly of rationally designed synthetic peptides into  $\beta$ -sheet tapes, ribbons, fibrils, and fibers opens up potentially useful routes to soft solid-like materials such as hydrogels, organogels, or liquid crystals. Here, it is shown how incorporation of Glu (side chain:  $\text{CH}_2\text{CH}_2\text{COOH}$ ) or Orn (side chain:  $\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2$ ) into the primary structure of an 11 amino acid peptide enables self-assembly to be rapidly (seconds) and reversibly controlled by simply changing pH. Solns. of monomeric peptide, typically at concns. in excess of 0.003 volume/volume, can be switched within seconds to, for example, nematic gel states comprised of interconnected orientationally ordered arrays of fibrils or vice versa. This is to be compared with the lyophilized peptide dissoln. route to nematic fluids and gels which is impracticably long, taking many hours or even days. An important design principle, that stabilization of fibrillar dispersions requires of the order of one unit of net pos. or neg. charge per peptide mol., is first demonstrated and then used to design an 11 amino acid peptide P11-3 ( $\text{MeCO-Gln-Gln-Arg-Phe-Gln-Trp-Gln-Phe-Gln-Gln-Gln-NH}_2$ ) whose self-assembly behavior is independent of pH ( $1 < \text{pH} < 10$ ). PH control is then incorporated by appropriately positioning Glu or Orn side chains so that the peptide-peptide free energy of interaction in the tape-like substructure is strongly influenced by direct electrostatic forces between  $\gamma\text{-COO}^-$  in Glu- or  $\delta\text{-NH}_3^+$  in Orn+, resp. This design principle is illustrated by the behavior of two peptides: P11-4 ( $\text{MeCO-Gln-Gln-Arg-Phe-Glu-Trp-Glu-Phe-Glu-Gln-Gln-NH}_2$ ) which can be switched from its nematic to its isotropic fluid state by increasing pH and P11-5 ( $\text{MeCO-Gln-Gln-Orn-Phe-Orn-Trp-Orn-Phe-Gln-Gln-Gln-NH}_2$ ) designed to exhibit the converse behavior. Acid-base titrns. of fibrillar dispersions reveal deprotonation of the  $\gamma\text{-COOH}$  of Glu or of the  $\delta\text{-NH}_3^+$  of Orn+ occurs over wide bands of up to 5 pH units, a feature of polyelectrolytes. The values of the energy parameters controlling self-assembly can therefore be smoothly and continuously varied by changing pH. This enables isotropic fluid-to-nematic transitions to be triggered by relatively small addns. of acid or base, typically 1 part in 103 by volume of 1 M HCl or NaOH.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:58116 HCAPLUS

DOCUMENT NUMBER: 138:112417

TITLE: Self-assembling  $\beta$ -barrel channel-forming peptides  
for wound dressing and other pharmaceutical uses  
INVENTOR(S): Agelli, Amalia; Boden, Neville; Hunter, Malcolm;  
Knowles, Peter  
PATENT ASSIGNEE(S): University of Leeds, UK  
SOURCE: PCT Int. Appl., 28 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003006494	A1	20030123	WO 2002-GB3212	20020712
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002319429	A1	20030129	AU 2002-319429	20020712
PRIORITY APPLN. INFO.:			GB 2001-17011	A 20010712
			WO 2002-GB3212	W 20020712

AB This invention relates to a novel form of  $\beta$ -barrel ion channels made of self-assembling peptides, to methods of their production and to uses thereof. The invention provides a self-assembling peptide  $\beta$ -barrel which comprises discrete peptide mols. each adopting a predominantly  $\beta$ -strand conformation. The  $\beta$ -barrels may be made by rationally designed peptides which self-assemble in the lipid membrane into beta barrels. The peptide  $\beta$ -barrels function as antimicrobial agents or antibacterial agents and act by forming a "hole" in the bacterium or microbe cell lipid bilayer. As an antimicrobial agent the  $\beta$ -barrel peptides of the invention are especially useful in wound care. The peptide  $\beta$ -barrels can allow ion flow and current to go through them. Their conductance properties can be altered by appropriate external triggers e.g. pH changes. Exemplary  $\beta$ -barrel forming self-assembling peptides and their conductance properties are described. The  $\beta$ -barrel channel-forming peptides are reconstituted into planar lipid bilayers by fusion of lipid vesicles containing the spanning channel. The assessment of the conductance and of the assembly states of the transmembrane peptides is made by the planar lipid bilayer method, where the ion channel activity is studied under voltage clamp conditions.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:578643 HCAPLUS  
DOCUMENT NUMBER: 132:108247  
TITLE: Self-assembling homopolymeric peptide tapes in aqueous solution  
AUTHOR(S): Aggeli, A.; Bell, M.; Strong, A.; Radford, S.; Boden, N.  
CORPORATE SOURCE: Centre for Self-Organising Molecular Systems, The University of Leeds, Leeds, LS2 9JT, UK  
SOURCE: Peptide Science: Present and Future, Proceedings of the International Peptide Symposium, 1st, Kyoto, Nov. 30-Dec. 5, 1997 (1999), Meeting Date 1997, 30-33. Editor(s): Shimonishi, Yasutsugu. Kluwer: Dordrecht, Neth.

CODEN: 68BYA5

DOCUMENT TYPE: Conference

LANGUAGE: English

AB A symposium on the self-assembly of peptides, using as an example an eleven-membered synthetic peptide which exhibits pH-controlled  $\beta$ -sheet formation in aqueous solns.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

	Ref #	Hits	Search Text
1	S1	0	q q r q q q q e q q
2	S2	0	Gln Gln Arg Gln Gln Gln Gln Gln Glu Gln Gln
3	S3	3	beta adj sheet adj tape-like
4	S4	5	"2003006494"
5	S5	2	"20060154852"
6	S6	3	(fibres or fibrils) and (beta adj sheet adj tape-like)
7	S7	3	S6 and peptide
8	S8	0	gln gln arg phe gln trp gln phe glu gln gln
9	S9	31	"5998588"
10	S10	2	"20030162696"
11	S11	556	antiparallel adj (beta adj sheet)
12	S12	0	antiparallel adj (beta adj sheet adj tape-like)
13	S13	3	antiparallel same (beta adj sheet adj tape-like)
14	S15	832	antiparallel same (beta adj sheet)
15	S14	82	antiparallel same (beta adj sheet) adj structure
16	S16	28	antiparallel same (beta adj sheet) adj structure and (fibrils or fibres)
17	S17	0	gln gln arg gln
18	S18	0	gln gln gln gln
19	S19	7	"6034211"
20	S20	4	"03006494"
21	S21	5	"2003006494"
22	S22	2	"9631528"
23	S23	17	boden-neville.in.
24	S24	9315	Mihara.in.
25	S25	19	Mihara-hisakazu.in.
26	S26	730	antiparallel same beta-sheet
27	S27	802	antiparallel same peptide
28	S28	3	S27 same ribbon same fibril same fibre
29	S29	41	S27 same (ribbon or fibril or fibre)
30	S30	4	"5710128"
31	S31	1	aggeli-amalia.in.
32	S32	3	aggeli-a.in.
33	S33	6	ingham-eileen.in.
34	S34	6	ingham-e.in.

	Ref #	Hits	Search Text
35	S35	2	kirkham-jennifer.in.
36	S36	4	kirkham-j.in.
37	S37	0	q q r f e w e f e q q
38	S38	0	gln gln arg phe glu trp glu phe glu gln gln
39	S39	17	boden-neville.in.
40	S40	0	aggeli-amelia.in.
41	S41	1	aggeli-amalia.in.
42	S42	6	ingham-eileen.in.
43	S43	2	kirkham-jennifer.in.